What is claimed is:

1. An aqueous gel useful for bleaching teeth comprising:

(i) water;

(ii) a polyacrylic acid thickening agent;

(iii) at least one bleaching agent selected from the group consisting of hydrogen peroxide and compounds that release hydrogen peroxide in water; and

(iv) a stabilizing agent selected from the group consisting of EDTA, CDTA, and a salt thereof,

where the bleaching agent is present in an amount ranging from 20% to 50% by weight, the polyacrylic acid thickening agent and the stabilizing agent are present in a weight ratio that maintains said aqueous gel in a gel form for 4 to 12 weeks at room temperature in a syringe plunger without self-expelling.

2. The aqueous gel of claim 1 where the polyacrylic acid thickening agent is crosslinked.

3. The aqueous gel of claim 2 where the polyacrylic acid thickening agent is a carbomer.

4. The aqueous gel of claim 1 where the bleaching agent is hydrogen peroxide or urea hydrogen peroxide.

5. The aqueous gel of claim 1 where the bleaching agent is hydrogen peroxide.

6. The aqueous gel of claim 1 additionally comprising (v) a neutralizing agent.

7. The aqueous gel of claim 6 wherein the neutralizing agent is a base selected from the group consisting of alkali metal hydroxides and ammonium hydroxide, carbonates, alkoxides, oxides, peroxides, superoxides, water soluble amines, and amino acids.

8. The aqueous gel of claim 6 wherein the neutralizing agent is selected from the group consisting of sodium hydroxide, potassium hydroxide, ammonium hydroxide,

triethanolamine, aminomethylpropanol, 2-amino-2-hydroxymethyl-1,3-propanediol, tetrahydroxypropyl ethyl enediamine, and tris(hydroxymethyl)aminomethane.

9. The aqueous gel of claim l, wherein the composition comprises:

(i) up to about 97% by weight water;

(ii) about 0.25% to about 3% by weight polyacrylic acid thickening agent;

(iii) about 20% to about 50% by weight bleaching agent selected from the group consisting of hydrogen peroxide and compounds that release hydrogen peroxide in water;

(iv) about 0.05% to about 0.50% by weight stabilizing agent; and

(v) a neutralizing agent present in an amount sufficient to fully neutralize the polyacrylic acid thickening agent.

11. The aqueous gel of claim 1, wherein the composition comprises:

(i) up to about 80% by weight water;

(ii) about 0.25% to about 3% by weight polyacrylic acid thickening agent;

(iii) about 20% to about 50% by weight bleaching agent selected from the group consisting of hydrogen peroxide and compounds that release hydrogen peroxide in water;

(iv) about 0.05% to about 0.50% by weight stabilizing agent; and

(v) a neutralizing agent present in an amount sufficient to fully neutralize the polyacrylic acid thickening agent.

12. The aqueous gel of claim 1 wherein the composition comprises:

(i) up to about 65% by weight water;

(ii) about 0.25 to about 3% by weight polyacrylic acid thickening agent;

(iii) about 35% by weight bleaching agent selected from the group consisting of hydrogen peroxide and compounds that release hydrogen peroxide in water;

(iv) about 0.15% by weight stabilizing agent; and

(v) a neutralizing agent present in an amount sufficient to fully neutralize the polyacrylic acid thickening agent.

13. The aqueous gel of claim 1, where the gel is also stable to the degree that no more than about 0.05% by weight of the hydrogen peroxide within the gel decomposes per day.

14. The aqueous gel of claim 1, where the bleaching agent is present in an amount ranging from about 30% to about 40% by weight.

15. The aqueous gel of claim 1, where the stabilizing agent is selected from the group consisting of $CaNa_2EDTA$, Na_4EDTA, and CDTA.